WHAT IS CLAIMED IS:

1. A flat display panel comprising:

two sheets of substrates;

a seal layer;

an exhaust hole; and

a seal plate,

wherein the peripheries of two sheets of substrates are sealed with the seal layer via a predetermined gap held therebetween and that the exhaust hole is provided in one of the two sheets of substrates,

and wherein the exhaust hole is sealed tightly by the seal plate.

2. The flat display panel according to claim 1 further comprising:

an exhaust seal unit,

wherein the seal plate is heat-secured to one of the two sheets of substrates by the exhaust seal means.

3. The flat display panel according to claim 1,

wherein the seal plate is formed of pressed frit prepared by press-molding crystalline low-melting glass powder and calcining the molded part.

4. The flat display panel according to claim 1, wherein the seal plate is formed of a glass plate providing high infrared-ray absorbency.

5. The flat display panel according to claim 1, wherein one of the substrates is formed of a glass substrate,

and wherein the thermal expansion coefficient of the seal plate is 0.8 - 0.65 time the thermal expansion coefficient of one of the glass substrates.

6. The flat display panel according to claim 1, wherein one of the substrates is formed of a glass substrate,

and wherein the thermal expansion coefficient of the seal plate is set at $60 \times 10^{-7}/°C$ - $95 \times 10^{-7}/°C$.

7. The flat display panel according to claim 1, wherein the outer surface of the seal plate is covered with a dampproofing resin.

8. A method of producing a flat display panel such that the peripheries of two sheets of substrates are sealed with a seal layer via a predetermined gap held therebetween and that an exhaust hole is provided in one of the two sheets

of substrates, the method comprising:

directly exhausting the air from the exhaust hole; and

heat-securing the seal plate to the exhaust hole so as to seal the exhaust hole tightly.